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NOTICE OF ALLOWANCE AND FEE(S) DUE

23995 7590 RABIN & Berdo, PC 1101 14TH STREET, NW SUITE 500 WASHINGTON DC 20005

06/26/2009

EXAMINER

TAYLOR, EARL N PAPER NUMBER ARTHNIT

2818

DATE MAILED: 06/26/2009

ſ	APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
Ī	10/577.450	04/27/2006	Sadamasa Fujii	AI 408NP	4769

TITLE OF INVENTION: ELECTRONIC DEVICE, SEMICONDUCTOR DEVICE USING SAME, AND METHOD FOR MANUFACTURING SEMICONDUCTOR DEVICE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	09/28/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. <u>PROSECUTION ON THE MERITS IS CLOSED.</u> THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown

B. If the status above is to be removed, check box 5b on Part B -Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

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appropriate. All further indicated unless correcte maintenance fee notificat	correspondence includir ed below or directed oth	or transr ig the Pa ierwise ii	nitting the ISSU tent, advance or n Block 1, by (a	ders and publication of r ders and notification of r specifying a new corres	maintenance fees w spondence address;	ill be and/or	mailed to the current (b) indicating a sepa	correspondence add rate "FEE ADDRES	lress as SS" for
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WASHINGTON	, DC 20005							(Depositor)	s name)
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									(Date)
APPLICATION NO.	FILING DATE			FIRST NAMED INVENTOR	:	ATTO	RNEY DOCKET NO.	CONFIRMATION N	iO.
10/577,450	04/27/2006			Sadamasa Fujii			AI 408NP	4769	
TITLE OF INVENTIO SEMICONDUCTOR DE		EVICE,	SEMICONDUC	TOR DEVICE USING	SAME, AND M	ETHO	D FOR MANUFAC	TURING	
APPLN. TYPE	SMALL ENTITY	ISSU	E FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUI	S FEE	TOTAL FEE(S) DUE	DATE DUE	
nonprovisional	NO		\$1510	\$300	\$0		\$1810	09/28/2009	
EXAM	INER	A	RT UNIT	CLASS-SUBCLASS	1				
TAYLOR,			2818	257-781000	•				
"Fee Address" indi PTO/SB/47; Rev 03-0 Number is required. 3. ASSIGNEE NAME A	ondence address (or Cha 3/122) attached. ication (or "Fee Address 2 or more recent) attach	nge of Co " Indicati ed. Use o	on form of a Customer PRINTED ON	2. For printing on the p (1) the names of up to or agents OR, alternati (2) the name of a single registered attorney or a 2 registered attorney or a 2 registered pattern attoristed, no name will be THE PATENT (print or tyld data will appear on the p I a substitute for filing an	o 3 registered paten vely, the firm (having as a agent) and the nam wneys or agents. If printed.	memb es of u no nam	er a 2 o to e is 3	ocument has been fi	led for
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	s SMALL ENTITY state	is. See 37		b. Applicant is no lon					
NOTE: The Issue Fee and interest as shown by the r	d Publication Fee (if req records of the United Sta	uired) wi tes Paten	II not be accepted t and Trademark	from anyone other than t Office.	the applicant; a regi	stered a	attorney or agent; or th	e assignee or other p	arty in
Authorized Signature					Date				
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23995	7590	06/26/2009		EXAMINER		
RABIN & Berdo, PC				TAYLOR, EARL N		
1101 14TH S	TREET,	NW	ART UNIT	PAPER NUMBER		
	SUITE 500 WASHINGTON, DC 20005				10	

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 440 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 440 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Application No. Applicant(s) 10/577,450 FUJII ET AL. Notice of Allowability Examiner Art Unit FARL N TAYLOR 2818 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to papers filed 15 May 2009. 2. The allowed claim(s) is/are 1,4-7 and 10-14. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) X All b) ☐ Some* c) ☐ None of the: 1. T Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. \(\overline{\text{Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). * Certified copies not received: _____. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. | Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application 2. Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413), Paper No./Mail Date Information Disclosure Statements (PTO/SB/08). 7. X Examiner's Amendment/Comment Paper No./Mail Date 4. T Examiner's Comment Regarding Requirement for Deposit 8. X Examiner's Statement of Reasons for Allowance of Biological Material 9. ☐ Other . /DAVID_VU/ Primary Examiner, Art Unit 2818

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Art Unit: 2818

EXAMINER'S AMENDMENT

Election/Restrictions

This application is in condition for allowance except for the presence of claims 8

and 9 directed to an invention non-elected without traverse. Accordingly, claims 8 and 9

have been cancelled.

An examiner's amendment to the record appears below. Should the changes

and/or additions be unacceptable to applicant, an amendment may be filed as provided

by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be

submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview

with Allen Wood on 19 June 2009.

The application has been amended as follows:

Cancel claims 8, 9 and 15

Allowable Subject Matter

Claims 1, 4-7 and 10-14 are allowed.

The following is an examiner's statement of reasons for allowance:

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Regarding Claim 1, the prior art of record alone or in combination neither teaches nor makes obvious the invention having the diffusion prevention film partially covering the top surface of the bump and the bonding film having a first portion in direct contact with the diffusion prevention film and a second portion in direct contact with the top surface of the bump in combination with all of the limitations of Claim 1.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance"

Telephone / Fax Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Earl N. Taylor whose telephone number is (571) 272-8894. The examiner can normally be reached on Monday-Friday from 8:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Loke can be reached on (571) 272-1657. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should Application/Control Number: 10/577,450 Page 4

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you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Examiner: Earl N. Taylor

/DAVID VU/ Primary Examiner, Art Unit 2818